

Automated L2 pronunciation tutoring: bridging the gap between research and commercialisation

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The past nearly two decades of breakthroughs in operationalising deep neural networks (see overview in LeCun et al., 2015) resulted in the creation of natural language processing systems which operate in a way that is remarkably similar to human brains (Millet et al., 2022) and achieve (or sometimes even exceed) human-level performance on a wide range of tasks (Zhang et al., 2022). This has significantly advanced the research and development of systems for automated language assessment (Yan et al., 2020), including automated pronunciation assessment (Kang & Ginther, 2017).

While automated pronunciation scoring in commercial high-stakes summative language assessments tends to reflect researchers' current understanding of L2 speech acquisition and the resulting best practices (Isaacs & Harding, 2017), this is still not the case with direct-to-consumer mobile applications for formative automated pronunciation assessment and tutoring (e.g. Becker & Edalatishams, 2019; Walesiak, 2020).

This talk will address the disconnect between industry practice and academic research & guidelines (e.g. Tejedor-García, 2020). First, we will review the main pedagogical shortcomings of commercial direct-to-consumer applications for automated pronunciation tutoring. Then, we will discuss the possible reasons for the gap between what the research says and what the business implements. We will end by outlining some steps towards a more successful translation of research into practice in the future.

References

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